## NOAA's Natural Disaster Reduction Initiative (NDRI) – FY2001 Out of Harm's Way



Weather-related natural disasters continue to plague our nation, bringing with them death, injuries, and economic disruption. Natural disasters occur with greater frequency. Economic costs continue to spiral as people and businesses move into vulnerable areas. The nation's infrastructure is becoming increasingly interdependent so disasters in one region effect other areas thousands of miles away.

NOAA has demonstrated the capability to reduce the impacts of natural hazards. NOAA's Natural Disaster Reduction Initiative (NDRI) holds the promise to keep natural hazards from becoming disasters. The President's Budget Request includes a \$110.million increase in natural disaster reduction related activities in three major areas:

-Strengthen Weather Services & Research -Enhance Satellite Coverage & Disaster Information -Apply New Technologies to Reduce Natural Disasters

## Strengthen weather Services & research (+\$36.2M)

**Adjustments to Base** (+\$15.7M). This will fund the mandated FY 2001 federal pay raise, the annualized FY 2000 pay raise of 4.8%, and cover labor related inflationary costs. Labor costs exceed 70% of NWS base operations. This funding will maintain critical staffing levels at local Weather Forecast Offices, River Forecast Centers, and National Centers such as the Tropical Prediction Center and the Storm Prediction Center. This increase also supports the services necessary to maintain and operate NOAA's satellite systems. Staffed round the clock, these offices are the nation's first line of defense against nature's most violent storms.

**Sustain Base Operations** (+\$8.4M). These funds support the nation's weather warning infrastructure. Maintaining communications, providing critical supplies, and sustaining facilities costs ensures round-the clock-operations of all local Weather Forecast Offices, River Forecast Centers, National Centers, and NWS communications links to the nation and the globe.

**NWS Systems Operations & Maintenance** (+\$6.8M). These funds will provide funds to continue operations of the NEXRAD, ASOS and AWIPS systems.

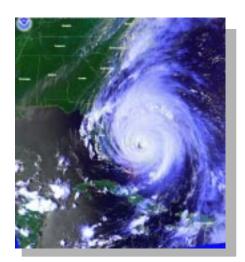


Cooperative Observing Network (+\$2.3M). This will sustain the Nation's cooperative observer network. The 11,000 volunteer observers help NOAA maintain the Nation's climate record and provides critical additional data such as snow fall amounts to NWS field offices. In FY 2001, NOAA will replace 900 obsolete rain gages and 200 temperature sensors. The National Research Council has urged NOAA to modernize this network. Any reduction in capability will impact NOAA's ability to make long-range forecasts and predict climate change.

**WFO Maintenance** (+\$2.0M). NOAA will use these funds to complete high priority repair actions at 20 WFOs. If unaddressed, the offices could lose capabilities or fail all together. Loss of any one field office will reduce services to areas the size of New Jersey.

**U.S. Weather Research Program** (+\$1.0M). NOAA will use the new funds to extend the forecasts of the location and amount of precipitation to at least two days in advance of a hurricanes arrival. This will give residents more time to mitigate and evacuate so that damage can be minimized.

## ENHANCE SATELLITE COVERAGE & DISASTER INFORMATION (+\$54.1M)



**GOES Program** (+\$25.2M). NOAA uses GOES spacecraft data, products and services to detect, assess and analyze natural and technological hazards. New instruments and ground systems will enable NOAA to better monitor and predict severe thunderstorms and tornadoes, flash flood producing rain storms, hurricanes, winter storms, and volcanic ash plumes.

**Polar Orbiting Satellites** (+\$6.5M). Polar orbiting satellites enable NOAA to detect, assess and analyze natural and technological hazards, and to monitor and detect climate trends and extremes. Polar satellites are the only platforms that can provide critical observations of the air and oceans across the entire globe. \$6.5M will continue and upgrade this service until the Department of Defense (DOD) and NOAA merge their polar orbiting satellite systems.

**NPOESS** (+\$16.9M). This funding is required to meet the Congressionally\_mandated request to merge the DOD and NOAA polar orbiting satellite systems. Combining and upgrading the instrumentation and ground systems of these two systems will significantly improve the nation's capability for long-range climate monitoring and prediction while saving the tax payers \$1.8 billion over the life of the program.

**Global Disaster Information Network** (+\$5.5M). NOAA will use these funds to leverage existing data sets (including classified data) to provide new and improved products to the public and emergency managers. For the first time, the U.S. government, through coordinated communications, will be able to provide an appropriate product suite and a coordinated process to respond to domestic and global disasters.

## Apply New technology to reduce natural hazards (+\$19.7M)

**AWIPS & NEXRAD** (+\$1.4M/+\$1.3M). Moving to an open system architecture in NEXRAD will allow use of off-the-shelf technologies to keep the national radar system on the cutting edge of technology. Combining this with new AWIPS software will enable the NOAA to implement new severe storm detection techniques to increase warning accuracies and lead times and reducing false alarms.

**ASOS** (+\$1.3M). Improvements to the all weather precipitation gage and the wind sensor will provide reliable measurements of rain, freezing rain, snow, and winds to support critical warning decision making. These funds all replace obsolete processors at 250 ASOS sites to ensure reliability.



**Computer Facilities Upgrade** (+\$4.0M). These funds support new super computer operations and their communications infrastructure. It will provide climate forecasts to support drought prediction and to provide local officials with two week predictions of extreme events including heat excessive heat forecasts.

**NOAA Weather Radio Expansion** (+\$6.2M). NOAA will install 30 new transmitters in high priority states. The expansion will enable the NWS to provide life-saving warnings directly into the nation's homes, schools, hospitals, and places of worship. NOAA Weather Radio is also the NWS entry point into the nation's Emergency Alert System. These additional transmitters will help the NWS attain its goal of reaching 95% of the U.S. population.

**Evansville, Indiana, Doppler Radar** (+5.5M). New funding will enable NOAA to acquire a Doppler Radar for the Evansville, Indiana, area where a radar coverage gap threatens the NWS ability to provide adequate warning service.